





Features

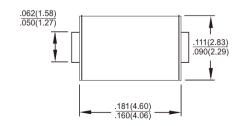
- ♦ For surface mounted application
- ♦ Glass passivated junction chip
- Built-in strain relief, ideal for automated placement
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- ♦ Fast switching for high efficiency
- \Rightarrow High temperature soldering: 260°C / 10 seconds at terminals
- Green compound with suffix "G" on packing code & prefix "G" on datecode

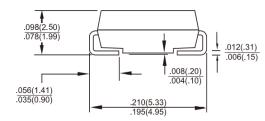
Mechanical Data

- ♦ Case: Molded plastic
- ♦ Terminals: Pure tin plated, Lead free
- ♦ Polarity: Indicated by cathode band
- ♦ Packing: 12mm tape per EIA STD RS-481
- ♦ Weight: 0.064 grams

1.0 AMP. Surface Mount Fast Recovery Rectifiers

SMA/DO-214AC





Dimensions in inches and (millimeters)

Marking Diagram



RS1X = Specific Device Code G = Green Compound

Y = Year M = Work Month

Maximum Ratings and Electrical Characteristics

Rating at 25 $^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, denate current by 20%

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Type Number	Symbol	RS 1A	RS 1B	RS 1D	RS 1G	RS 1J	RS 1K	RS 1M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ T_L =90 $^{\circ}$ C	I _{F(AV)}	1							Α
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30							Α
Maximum Instantaneous Forward Voltage (Note 1) @ 1 A	V _F	1.3							٧
Maximum Reverse Current @ Rated VR T_A =25 $^{\circ}$ C T_A =125 $^{\circ}$ C	I _R	5 50							uA
Maximum Reverse Recovery Time (Note 2)	Trr	150			250	500		nS	
Typical Junction Capacitance (Note 3)	Cj	10						pF	
Typical Thermal Resistance	$R_{\theta jA} \ R_{\theta jC}$	105 32						°C/W	
Operating Temperature Range	TJ	- 55 to + 150							οС
Storage Temperature Range	T _{STG}	- 55 to + 150							°С

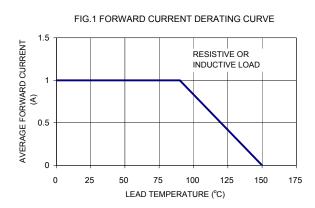
Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

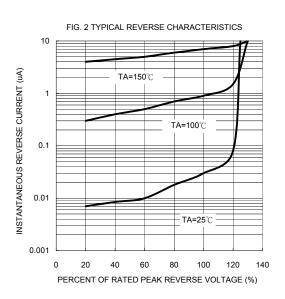
Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

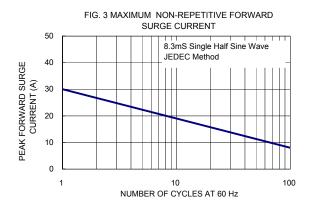
Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

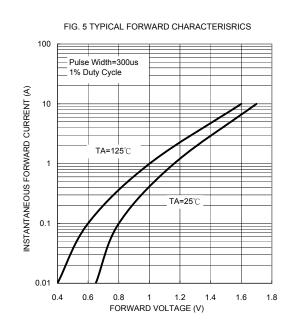


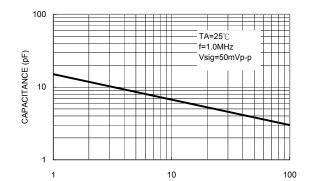
RATINGS AND CHARACTERISTIC CURVES (RS1A THRU RS1M)











REVERSE VOLTAGE (V)

FIG. 4 TYPICAL JUNCTION CAPACITANCE



